

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for determining cyclase inhibiting parathyroid hormone (CIP) in a sample comprising:

- a) adding to the sample a labeled antibody or antibody fragment specific for a peptide sequence for CIP that presents an epitope ~~available~~ accessible for antibody binding in CIP, but ~~will not bind to this same peptide sequence~~ which epitope is inaccessible for antibody binding in cyclase activating parathyroid hormone, in an amount sufficient to bind the CIP present, wherein the CIP comprises a contiguous portion of PTH, the PTH having an amino acid sequence set forth in SEQ ID NO:3 (PTH₁₋₈₄), and the CIP having an N-terminal amino acid residue starting at position 7 of the PTH₁₋₈₄ PTH and a C-terminal amino acid residue ending at position 84 of the PTH₁₋₈₄ PTH;
- b) allowing the labeled antibody to bind to any CIP present, thereby forming a complex; and
- c) measuring the amount of labeled complex.

2. (original) The method of Claim 1 wherein the labeled CIP antibody or antibody fragment is one of the following, a monoclonal antibody and a polyclonal antibody.

3. (currently amended) The method of claim 1 wherein a second antibody is added which is bound to a solid support and specifically binds to a portion of CIP other than that of bound by the labeled antibody, thereby forming a complex.

4. (currently amended) The method of Claim 3 wherein the solid support is selected from the group consisting of ~~a protein binding surface~~, colloidal metal particles, iron oxide particles, latex particles, and polymeric beads.

5. (currently amended) The method of ~~Claim 3~~ Claim 1, wherein a second antibody that specifically binds to a portion of CIP other than that bound by the labeled antibody is added and

is allowed to bind to any CIP present that is bound to labeled antibody, wherein the resultant complex precipitates from solution.

6. (currently amended) The method of Claim 1 wherein the label ~~or signal generating component~~ is selected from the group consisting of ~~chemiluminescent agents, colorimetric agents, energy transfer agents, enzymes, fluorescent agents, and radioisotopes~~ a chemiluminescent agent, a colorimetric agent, an energy transfer agent, an enzyme, a fluorescent agent, and a radioisotope.

7. (currently amended) A method for measuring the amount of cyclase inhibiting parathyroid hormone (CIP) fragment in a sample comprising:

- a) adding to the sample a first antibody or antibody fragment in an amount sufficient to bind the CIP present, wherein the first antibody or antibody fragment is specific for a peptide sequence for CIP that presents an epitope ~~available~~ accessible for antibody binding in CIP, but ~~does not bind to this same peptide sequence~~ which epitope is inaccessible for antibody binding in cyclase activating parathyroid hormone, wherein the CIP comprises a contiguous portion of PTH₁₋₈₄, the PTH having an amino acid sequence set forth in SEQ ID NO:3 (PTH₁₋₈₄), and the CIP having an N-terminal amino acid residue starting at position 7 of the PTH₁₋₈₄ PTH and a C-terminal amino acid residue ending at position 84 of the PTH₁₋₈₄ PTH;
- b) allowing the first antibody to bind to any CIP present, thereby forming a first complex;
- c) adding a second antibody that specifically binds to a portion of CIP other than the peptide sequence which binds to the first antibody and allowing the second antibody to bind to the first complex thereby forming a second complex, wherein ~~said~~ the first antibody or ~~said~~ the second antibody has a label or signal generating component attached thereto; and
- d) determining the presence, absence or amount of the ~~labeled~~ second complex.

8. (currently amended) The method of Claim 7 wherein the second ~~labeled~~ antibody is added sequentially or simultaneously with the first antibody.

9. (original) The method of Claim 7 wherein the first antibody is bound to a solid support.

10.-16. (cancelled)

17. (currently amended) A kit ~~containing agents~~ for performing an assay for cyclase inhibiting parathyroid hormone (CIP), the kit comprising:

a) a first antibody or antibody fragment specific for a peptide sequence for CIP that presents an epitope ~~available~~ accessible for antibody binding in CIP, but ~~does not bind to this same peptide sequence~~ which epitope is inaccessible for antibody binding in cyclase activating parathyroid hormone, wherein the CIP comprises a contiguous portion of PTH, the PTH having an amino acid sequence set forth in SEQ ID NO:3 (~~PTH₁₋₈₄~~), and the CIP having an N-terminal amino acid residue starting at position 7 of the ~~PTH₁₋₈₄~~ PTH and a C-terminal amino acid residue ending at position 84 of the ~~PTH₁₋₈₄~~ PTH; and

b) a second antibody that specifically binds to a portion of CIP other than the peptide sequence which binds to the first antibody, which is bound to a solid support.

18. (previously presented) The kit of Claim 17 further comprising an antibody specific for the C-terminal portion of CIP.

19. (currently amended) The method of Claim 7 wherein the second antibody is bound to a solid support, and wherein the solid support is selected from the group consisting of a ~~protein binding surface~~, a colloidal metal particle, an iron oxide particle, a latex particle, and a polymeric bead.

20. (currently amended) The method of ~~Claim 19~~ Claim 7 wherein the labeled complex precipitates from solution.

21. (previously presented) The method of Claim 7 wherein the label or signal generating component is selected from the group consisting of a chemiluminescent agent, a colorimetric agent, an energy transfer agent, an enzyme, a fluorescent agent, and a radioisotope.

22. (previously presented) The method of claim 7, wherein the label or signal generating component is attached to the first antibody.

23. (previously presented) The method of claim 7, wherein the label or signal generating component is attached to the second antibody.

24. (previously presented) The method of Claim 7 wherein the first antibody or antibody fragment is either of the following, a monoclonal antibody or a polyclonal antibody.

25. (previously presented) The method of Claim 7 wherein the second antibody or antibody fragment is either of the following, a monoclonal antibody or a polyclonal antibody.